

## Buffalo Rapids Irrigation Project District 1

### Lateral 26.4 Conversion Project

In the late 1990's BRIP worked with the NRCS to develop a complete assessment and analysis of its two irrigation districts. The studies & analyses resulted in the development of canal efficiency ratings and pipeline replacement rankings. Over the past 10 years the BRIP has replaced a number of laterals with closed pipeline delivery systems that has conserved millions of gallons of water each year. Lateral 26.4 is the next priority project for the NRCS and District 1. A field review was conducted in October 2009 to observe the severe vegetative overgrowth and poor canal characteristics for Lateral 26.4. Replacement of the open canal system with a pipeline system will eliminate seepage through the entire reach, improve irrigation delivery efficiency and effectiveness, conserve water pumped from the Yellowstone River, and eliminate total maximum daily load (TMDL) concerns from an irrigation water discharge into the Yellowstone River. Using soils information and canal geometry, it was calculated that Lateral 26.4 loses over 7 cfs (960 million gallons per year). The proposed improvements will help the BRIP eliminate seepage loss, improve water quality, improve water management, and increase crop yields.

The proposed project will provide the BRIP with improved conservation, management, development, and preservation of land and water resources. The severe water losses currently amount to a revenue loss of up to \$105,650 per year from reduced crop production. Implementation of the proposed pipeline conversion will result in improved irrigation efficiency and increased crop yields to restore lost revenues to the local economy.

The conversion of Lateral 26.4 to a closed pipeline system the following benefits:

- Elimination of seepage
- Improved water delivery efficiency
- Improved irrigation efficiency
- Conservation of water pumped from the Yellowstone River
- Elimination of TMDL concerns from irrigation water discharge into the Yellowstone River
- Increased crop yields
- Improved water quality
- Restoration of lost revenues to the local economy
- Maximized beneficial use of diverted water
- Increased river flows
- Improved fish and wildlife habitat
- Increased local and state tax base
- Sustained agricultural production

Grant Request Amount:	\$100,000.00
NRCS EQUIP Match Amount:	\$113,376.00
Buffalo Rapids Irrigation Project Match Amount:	\$95,628.00
Estimated Total Project Cost:	\$309,004.00

Buffalo Rapids Irrigation Project sincerely appreciates your consideration of this project and hopes that you will find it as important and necessary as our residents and your constituents have.

